

US EPA ARCHIVE DOCUMENT

**ENVIRONMENTAL FATE AND EFFECTS DIVISION**  
**ECOLOGICAL EFFECTS BRANCH**  
**List B Phase 4 - Response on Existing Studies Reviewed**

**CHEMICAL AI NAME:** Brodifacoum  
**CHEMICAL NO.:** 112701

**CASE NO.:** 2755

**REVIEWER'S NAME:** James J. Goodyear  
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**DATE:** January 4, 1991

**USE PATTERN(S):** In and around buildings.

**GUIDELINE NO.:** 171, 172, 121, 122, 124, and 141.

**TITLE:** Ecological Effects Branch review of Brodifacoum Phase IV studies.

**MRIDS AND DATES OF STUDIES REVIEWED:**

**ACCEPTED**

MRID 92195-03, 1990 (done 1980)

**REJECTED**

066942	1978	Changed to Invalid.
124472	1978	Changed to Supplemental.
124473	1978	Changed to Supplemental.
124474	1978	Changed to Invalid.
128442	1978	Changed to Invalid.
088011	1976	Kept Invalid but on another basis.
080248	1976	Made Supplemental

**MRIDS AND DATES OF FULLY ACCEPTABLE STUDIES:**

415633-03, 1990      124477, 1978      124476, 1978

**COMMENTS:**

Brodifacoum is an anticoagulant, therefore, toxicity tests should have a longer observation period than other pesticides. Because of its low LD<sub>50</sub>s, brodifacoum tests should have a longer observation period than other anticoagulants. The Aquatic toxicity tests did not, but it was thought that the usage pattern made the aquatic toxicity less important. If a new usage pattern is proposed, the aquatic toxicity tests may have to be repeated.

Several toxicity tests were done in two or even three parts. The data was then lumped to calculate the or LD<sub>50</sub> or LC<sub>50</sub>. This is not acceptable statistically and none of these tests were excepted as calculated. A few were accepted as supplemental; these figures may be useful in designing the field studies that will have to be done, but they cannot be used to fulfil the requirements for reregistration.

Since Brodifacoum degrades in water, measured levels of the actual test water are required.

See Comment section of individual studies for their specific information.

